



A STUDY ON FINANCIAL ASPECTS OF PROFIT MAKING IN LAC BANGLE MANUFACTURING IN PANDHARPUR

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ABSTRACT

Bangles, traditional ornaments worn by women are the essence of womanhood and a tradition that has continued since ages. Every woman in the world, who has seen lac bangles, would like and love to wear these bangles as it adds more charm and glory to her beauty and personality. Traditional business is hardly meets their needs due to less modern knowledge, lack of technology, stick with old designs, and failure to channel the traditional and modern tastes. While new designs and forms conforming to modern taste need to be introduced, the traditional design must be preserved. Automation is having tremendous scope in

Lac bangle manufacturing. It is more important to improve the technique and method of production, instead of replacing the traditional designs with the modern one. The present study focuses on introduction of new technique and method of production of Lac bangles to change the livelihood of Pandharpur bangle manufacturers.

Key Words : *Lac bangle, modern, traditional, automation, livelihood.*

I INTRODUCTION :

Bangles had been an important ornament of women since long in many parts of the world and particularly in the sub-continent. Women, particularly married, feel

incomplete without bangles as these are considered a symbol of joy and happiness.

Lac is a colored resin that is obtained from wild trees. It is collected from insects that accumulate this resin and is thoroughly purified before use. Multicolored balls and sticks of lac are made by twisting colored melted sealing wax round the stick or ball from top to bottom in alternate bands. Thereafter, the stick or ball is held before the fire and with the help of a needle different colorful designs are made on them. These are then rapidly rolled on a cool and smooth surface. Making of lac bracelets also includes elaborate steps.



Fig 1.1 Lac Bangles

Pandharpur being a holy place and the abode of Lord Vithala, pilgrims visit Pandharpur and women depart wearing bangles as a part of a holy ritual. Lac bangles with appealing colors and cultural patterns have become more fashionable for today's jet-set women. But, in Pandharpur, only traditional bangles are manufactured. Keeping a check on the latest trends from across the country and the globe, the lac

bangle-makers need to adapt to the modern trends. There are around 30 bangle manufacturers in Pandharpur, who have been manufacturing them by the same traditional methods from five generations. It is the main source of income that supports their livelihood. Their standard of living is as yet not upto the mark. If they foresee it as their future source of livelihood and aim to survive and at the same time upgrade their standard of living, they need to change the method of manufacturing.

The present study focuses one case study on the change in livelihood of bangle manufacturers by automation and modernization of these industries by considering the financial aspects. Business concern needs finance to meet their requirements in the economic world. Any kind of business activity depends on the finance. Hence, it is called as lifeblood of business organization. Whether the business concerns are big or small, they need finance to fulfill their business activities.

2. TRADITIONAL PROCEDURE OF LAC BANGLE MAKING

During this process the, Lac pieces are first melted in a shallow vessel or *kadai*. When it is in a semi-molten state, *Pevedi* (yellow) powder, and color are added to it. The mixture is stirred continuously. The colored

lac is now stuck on the end of a wooden stick.



Fig.2.1.Ranzha

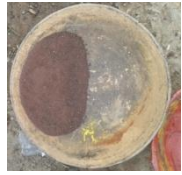


Fig.2.2.Lac



Fig.2.3.Pevedi



Fig.2.4. Manually mixing of raw material.

The lac (without pigment) stuck around a wooden rod is heated slowly over the coal burner or *angethi*. It is simultaneously pressed with a stone or a wooden tool called *hattha* at regular intervals. When it is sufficiently warm and soft, it is wrapped with the desired color by rubbing the colored lac stick on it evenly. For this purpose the colored lac stick also has to be warm enough and is therefore heated over the burner. After the color has been applied to the lac base it is shaped into a thin coil with the help of *hattha* and cut off from the plain lac rod.

Heating the uncolored lac then uncolored lac pressed with *hattha*; Rubbing the colored lac. The coil is heated over the burner so that the ends can be joined together to form a

bangle. After being joined it is slipped through a round wooden beam (with a tapering end for different sizes) and adjusted for size.

The bangle is ready to be embellished with sequins, semi-precious stones, etc. The sequins are placed on a tin foil and heated over a burner. They are warmed so that they can melt the lac surface on which they are placed and stick there after solidification. They are picked up one at a time and stuck on the Bangle. The process requires great precision. It takes much longer when working with smaller sized sequins.

However many disadvantages are there for uniform mixing of raw material by manually for making LAC bangles, in this process involves many drawbacks are as listed below:

- For mixing these raw materials, skilled worker is required
- He has to take lots of efforts for uniform mixing of raw material.
- Due to fumes health problem occurs to the operator.
- Excess heat can change the property of raw material.
- Less safety for the operator as surrounding is hazardous.

3. LAC BANGLE MANUFACTURING THROUGH PARTIAL AUTOMATION

At the present scenario, in Maharashtra lac bangles are second most worn type of bangles after glass bangles by women. The lac bangle industry is growing a lot in India and it supplies extensively to the whole India as well as to the whole world. The Study was carried out in the state of Maharashtra where Solapur District Pandharpur Town was chosen as study location based on the existence of the lac industries.

There are around 30 bangle manufacturers in Pandharpur, who have been manufacturing them by the same traditional methods from five generations. It is the main source of income that supports their livelihood. Their standard of living is as yet not upto the mark. If they foresee it as their future source of livelihood and aim to survive and at the same time upgrade their standard of living, they need to change the method of manufacturing. So as to, enable them to compete with the standard of bangles from Hyderabad, and to fulfill the expectations of customers of Choodi Bazaar.

They contribute significantly to the livelihood of the people;

- they are relatively long-established over the years and are technologically underdeveloped
- they are among the more popular crafts and thus have a immense development potential.

Stirring is the process to mix the fluid and powder to dissolve the powder thoroughly in given mixture and form a uniform product. The stirrer of conventional machine rotates in one direction only which creates a particular flow pattern in the fluids hence the particles tend to stick to the walls of container owing to the centrifugal force rather than mixing thoroughly in mixture, ultimately results into poor quality mixture of fluid there by poor quality output of fluid. To overcome the above drawbacks and increase the production quality by introducing automatic mixing device with separate heating arrangement was developed. Keeping a check on the latest trends from across the country and the globe, the LAC bangle-makers need to adapt to the modern trends. The present study focuses on the change in livelihood of bangle manufacturers by automation and modernization of these industries. Current work focused on design and development of planetary stirrer with controlled heating arrangement for the LAC bangles

manufacturing. Main aim of this work is to reduce human efforts involved in LAC bangles manufacturing by developing a device which is used for uniform heating and mixing of raw material.



Fig. 3.1. Early trials of planetary stirrer

In this case study of Pandharpur automation is done in first operation of lac mixture, following outcomes are observed while doing Comparison of conventional and automated raw material mixing operation :

Parameters	Conventional Mixing	Automated Mixing
1. Time required	30 Minutes	15 to 18 Minutes
2. Labour Efforts	More	Less
3. Production	Less	More
4. Type of Labour	Skilled	Semi Skilled
5. Labour Cost	More	Less
6. Overall Cost	Less	More

This is the beginning where the automation is employed in Lac bangle raw material stirring mixture. Due to this, there is significant improvement in production, profit and in quality of raw material. Still further operations are there where automation can be employed through rolling mills. If State of art manufacturing machine can be built, then it will be great service to Lac bangle manufacturing, whereby production quality can be improved and manufacturer can think about new designs, new market and in turn improvement in their livelihood.

4. CONCLUSION :

After conducting trials by lac bangle manufacturing unit with planetary stirrer following conclusion can be drawn.

1. Uniform heating and mixing of LAC is possible with planetary stirrer.

2. Improved productivity : By converting the traditional manufacturing industry into mass production industry with the same manpower higher output can be achieved. This will help increase sales and there by enhance their earning.

3. Reduction in human efforts : It helps reduce physical labourr and time which can be employed for other activities of production.

4. Reduction in labour cost due to mechanization : The equipments used in traditional manufacturing of the bangles are crude and heavily depend on the skill of the workers. Thus, the owner is dependent on skilled man power. These equipments can be converted into mass production equipment which does not depend on skill of the artisan/workers.

6. Reduction in Cost of Production : In traditional lac bangle manufacturing the approximate cost of raw materials like coal & Wood (Rs.20 per cycle), Skilled labour (Rs.300 per day) is incurred, where as in partial automation only cost of electricity 1 unit per cycle (Rs.8) and unskilled labour (Rs.250) is incurred. Resulting in saving of Rs.62 per cycle.

5. Improved Profitability: Due to increase in the productivity it is possible to gain more profit in the bangle business which is helpful in surviving the current market scenario.

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